STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

Docket No.: 2020-229-E

Dominion Energy South Carolina, Incorporated's Establishment of a Solar Choice Metering Tariff Pursuant to S.C. Code Ann. Section 58-40-20 (See Docket No. 2019-182-E)	**SURREBUTTAL TESTIMONY OF ALDER ENERGY SYSTEMS, LLC**

Intervenor Alder Energy Systems, LLC offers the direct testimony of its witness and Chief Executive Officer, **Donald R. Zimmerman**, MS, MBA, NABCEP, as follows.

Q: ARE YOU THE SAME DONALD ZIMMERMAN THAT OFFERED PRE-FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A: Yes.

Q: DO YOU HAVE ANY CHANGES TO YOUR DIRECT TESTIMONY?

A: Yes. The sentence beginning on Page 6 line 20 of my direct testimony should read: "Customer-generat[ed] consumption translates into bill savings for the customer and importantly – from a utility-cost perspective – has no perceptible difference from energy efficiency improvements, load reductions, or demand-side-management."

<< SURREBUTTAL TO DESC WITNESS ROBINSON >>

Q: DO ALDER ENERGY'S CUSTOMERS AGREE WITH DESC WITNESS ROBINSON'S TESTIMONY THAT PAYBACK PERIOD IS "NOT A GOOD WAY TO COMPARE INVESTMENTS?" (ROBINSON 16:16.)

A: Alder Energy has installed distributed solar generation ("DG") systems in DESC territory[1] for over a decade. In that time Alder Energy has made hundreds of proposals to potential nonresidential DG customers in DESC territory, which contain various data points including payback period and ROI. Alder speaks from this experience, not a textbook.

Regardless of DESC Witness Robinson's opinion, payback period is a primary consideration/data point for nonresidential customers considering an investment in DG. South Carolina businesses often desire a four to five-year payback period on new equipment purchases, but will tolerate slightly longer payback periods to achieve the many benefits of distributed solar generation. This is consistent with my direct

[1] "DESC territory," as referenced in this testimony is inclusive of matters relative to DESC's predecessor, South Carolina Electric and Gas.

testimony and derived from review of the company's data produced to DESC in this proceeding.

Q: DESC WITNESS ROBINSON ARGUES THAT "SIMPLE PAYBACK IS ONLY RELEVANT FOR CASH PURCHASED SYSTEMS." (ROBINSON 16:10-11.) IN THE DECADE THAT ALDER ENERGY HAS INSTALLED NONRESIDENTIAL DG IN DESC TERRITORY, HAS THE COMPANY EVER LEASED A SYSTEM?

No.

Q: DESC WITNESS ROBINSON DISAGREES WITH YOUR TESTIMONY THAT "A PAYBACK LOWER THAN EIGHT YEARS REQUIRES 1:1 NET METERING." DESC WITNESS ROBINSON'S OPINION IS BASED ON MODELING A 12.5KW SYSTEM. (ROBINSON 17:10-16.) WHAT IS ALDER ENERGY'S AVERAGE DG SYSTEM SIZE INSTALLED IN DESC TERRITORY?

A: 90.5 kW DC. DESC Witness Robinson's modeling is therefore irrelevant to Alder Energy's direct testimony. DESC Witness Robinson's incomplete and exclusive modeling is troubling and disingenuous when used to oppose Alder Energy's position that DESC's proposed Solar Choice tariffs will kill ROI and payback period. (Robinson 19:6-19.)

Q: ROBINSON TESTIFIES ALDER ENERGY'S TESTIMONY—RELATIVE TO PAYBACK PERIOD—IS "BASELESS AND EXAGGERATED." (ROBINSON 19:11.) HOW DID ALDER COME TO ITS CONCLUSIONS RELATIVE PAYBACK PERIOD?

A: Alder Energy's conclusions are based on company data. Alder Energy installed forty nonresidential DG systems in DESC territory from July 2012 to present. In developing the company's testimony and conclusions, Alder Energy reviewed hundreds of pages of proposals for these forty nonresidential systems. From this data, Alder Energy concludes the average payback period is 5.45 years. This payback figure is inclusive of outlier projects, including one requiring distribution network upgrades

and one with a fifteen-year payback (for a public entity that could not take advantage of ITC). Of the forty nonresidential customer generation projects installed in DESC territory, only two projects have been installed with more than a seven-year payback period: the 15-year project discussed above, and one eight-year payback project.

Q: DOES DESC HAVE ACCESS TO THE SAME INFORMATION?

A: Yes. The same proposals—redacted to exclude client names—were produced to DESC in discovery.

<< SURREBUTTAL TO DESC WITNESS EVERETT >>

Q: WHAT IS YOUR RESPONSE TO DESC WITNESS EVERETT'S TESTIMONY THAT: "HELPING A CUSTOMER BETTER ADAPT TO A TOU RATE IS NOT ABOUT PROVIDING HISTORICAL DATA, BUT . . . ABOUT PROVIDING THEM WITH INFORMATION ABOUT POTENTIAL BEHAVIORAL CHANGES IN THE FUTURE TO MANAGE THEIR ENERGY USE CONSISTENT WITH TOU RATE DESIGNS?" (EVERETT 28:21-29:3.)

A: Customer access to hourly energy load data (8760 data) is a consumer protection issue and not proposed in this proceeding for delay.

When considering switching from an all-energy rate to a TOU rate, while also adding solar generation, hourly load data (8760 data) is necessary for providing the most accurate solar energy consumption and export estimates. Without that data the customer can only guess at the impact the system will have on load reduction and export compensation. While creating a thorough solar proposal that demonstrates estimated cash flow, when switching from an all energy rate to TOU with solar, a solar company will overlay the past year's hourly energy use (8760) with the solar system's estimated hourly energy production to project the customer's hourly energy consumption and export. This clarifies the cost of the energy that the customer is

expected to purchase from DESC (whether on-peak or off-peak) as well as the value of the solar energy production.

Without 8760 data, the lack of clarity and ability to create a proposed model, exposes to a customer to misrepresentation and fraud. As one of the pioneers of the solar industry in South Carolina, Alder Energy has supported a number of initiatives to limit the opportunity for unscrupulous vendors to misrepresent the benefits that a solar project can provide. These efforts have included providing the SC Department of Consumer Affairs with proposed language requiring all solar sales proposals provide some common, comparative data: $/W and kWh/kW. Alder Energy's concern that potential solar consumers are able to make a well informed decision based upon accurate data is why the company requested the Commission to mandate availability of 8760 data before implementation of any hourly netting TOU tariff.

<< SURREBUTTAL TO DESC WITNESS KASSIS >>

Q: DESC WITNESS KASSIS TESTIFIES THE SUBSCRIPTION FEE IS COST-BASED AND THAT "AN INCREASE IN THE ROOFTOP SYSTEM'S SIZE CORRESPONDS TO AN INCREASED DEMAND PLACED UPON THE GRID VIA ENERGY DELIVERED TO THE CUSTOMER AND ENERGY EXPORTED TO DESC." (KASSIS 11:6-8.) IS THERE A CORRELATION IN DG SYSTEM SIZE AND GRID DEMAND?

A: There is no causal relationship between DG system size and demand on the grid. A 200kW peak demand customer with a 10 kW solar system has a greater impact on the grid than a 50kW peak demand customer with a 20kW solar system. Witness Kassis' logic is flawed, and to scale a Subscription Fee by system size and claim it is proportional to grid impact is disingenuous and penal in contravention of the Energy Freedom Act.

Moreover, hourly netting would significantly reduce the economic value of a NEM solar energy system. DG system sizes would naturally be reduced to minimize the hourly exports. DG system costs would therefore increase on a per Watt basis reducing ROI and increasing the payback period. This alone would reduce adoption of solar. This is not the intent of A62 legislation.

Q: DESC WITNESS KASSIS TESTIFIES YOUR PERSONAL MOTIVE IN THIS PROCEEDING IS TO PROFITEER FROM SOLAR POLICY. (SEE, E.G., KASSIS 8:14-17 AND 15:8-13.) CAN ALDER ENERGY DEMONSTRATE OTHERWISE WITHOUT MERELY REFERRING THE COMMISSION TO THE COMPANY'S DIRECT TESTIMONY?

A: Yes. Alder Energy negotiated a compromise solution to its dispute with Duke Energy Progress, LLC and Duke Energy Carolinas, LLC in those utilities' sister Solar Choice tariff proceedings (dockets 2020-264-E and 2020-265-E) and filed a joint stipulation memorializing the same. The terms of that stipulation will reduce the number of projects that will meet the acceptable investment criteria in Duke Energy's territory.

Q: DESC WITNESS KASSIS CRITICIZES ALDER ENERGY FOR NOT "PROVIDING ACTUAL DETAILS, RATHER THAN BALD ASSERTIONS REGARDING WHAT CUSTOMERS WILL TOLERATE, ABOUT THE ROOFTOP *LEASING* MARKET IN SOUTH CAROLINA FOR THE COMMISSION TO HAVE . . . EVIDENCE TO EVALUATE [YOUR] . . . UNSUBSTANTIATED CLAIMS." (KASSIS 18:3-6.) IN THE DECADE THAT ALDER ENERGY HAS INSTALLED NONRESIDENTIAL DG IN DESC TERRITORY, HAS THE COMPANY EVER LEASED A SYSTEM?

A: No. Alder Energy has not testified in this docket, the sister Duke Energy NEM docket, or the Generic Docket on matters germane to leased solar.

Q: WOULD TIMELY DISCOVERY HAVE BORN THIS OUT?

A: Alder Energy hesitates to invite future burdensome and unnecessarily invasive discovery requests from DESC. However, Alder notes its answers to DESC's interrogatories include comment that the company has not leased solar. DESC makes bald and unsubstantial claims about Alder Energy's business throughout its rebuttal testimony based on nothing but assumption and conjecture and without even timely seeking the facts that would support them.

Q: DOES THAT CONCLUDE YOUR TESTIMONY?

A: Yes.

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